

Appl. No. 09/819,194
Amdt. F dated January 18, 2004
Reply to Office action of October 19, 2004

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A portable facility for reconditioning an antifriction bearing having components including a race provided with a raceway and rolling elements that roll along the raceway, said facility comprising: an enclosure that is portable in the sense that it can be moved by a transport vehicle; means within the enclosure for inspecting components of the bearing; more means within the enclosure for repairing defects in components of the bearing; and spare races and rolling elements located within the enclosure to replace damaged races and rolling elements.
2. (previously presented) A portable facility according to claim 1 and further comprising means within the enclosure for lubricating the bearing.
3. (previously presented) A portable facility according to claim 2 and further comprising means for cleaning the bearing.
4. (previously presented) A portable facility according to claim 3 wherein the means for cleaning the bearing is located outside the enclosure.
5. (previously presented) A portable facility according to claim 4 wherein the enclosure has at least one end through which access to the interior of the enclosure is obtained, and further comprising a deck at said one end of the enclosure, the means for cleaning the bearing being on the deck.

6. (previously presented) A portable facility according to claim 2 wherein the enclosure contains stations at which the means for inspecting, repairing defects, and lubricating the bearings are located; wherein the enclosure has side walls and the stations are located along the side walls; and wherein a center aisle separates the stations along each side wall.

7. (original) A portable facility according to claim 1 wherein the enclosure has side walls, ends through which access to the interior of the enclosure is obtained, a roof which extends between the side walls and over the interior of the enclosure, and doors attached to the side walls for closing the ends of the enclosure.

8. (previously presented) A portable facility for reconditioning a tapered roller bearing including a cup having a tapered raceway that is presented inwardly, a cone having a tapered raceway that is presented outwardly toward the raceway of the cup, tapered rollers located in a row between the raceways of the cup and cone, and a cage fitted to the rollers to maintain the correct spacing between the rollers and to retain the rollers around the cone in the absence of the cup, thus uniting the cone, rollers and cage into a cone assembly, said facility comprising: an enclosure containing a plurality of stations and being portable in the sense that it can be moved by a transport vehicle; means at one of the stations for inspecting the cone assembly; means at another of the stations for inspecting and repairing the raceway of the cup; means at still another

station for opening the cage and releasing the rollers; means at yet another station for repairing the raceway of the cone; a spare cage in the enclosure for replacing an opened cage; and means at another station for closing a new cage about the rollers on the cone to retain the rollers on the cone and unite the cone assembly formed by cone, rollers, and new cage.

9. (currently amended) A portable facility according to claim 8 and further comprising means in the enclosure at another station for lubricating the cone assembly, ~~and~~ means at still another station for installing a seal into the cup, with the seal being configured to retain the cone assembly in the cup; and spare seals in the enclosure.

10. (previously presented) A portable facility according to claim 8 for reconditioning a bearing having two raceways in its cup, two cone assemblies, and a spacer between the cones, with the spacer being long enough to impart end play to the bearing; and further comprising means at yet another station for measuring the end play in the bearing.

11. (original) A portable facility according to claim 8 wherein the enclosure has side walls; wherein the stations are located along the side walls; and wherein the enclosure contains an aisle that is located between the stations along each side wall.

12. (previously presented) A portable facility according to claim 8 and further comprising a deck adjacent to the enclosure and means on the deck for removing grease from the bearing.

Claims 13-18 are canceled.

19. (previously presented) A portable facility according to claim 1 wherein the bearing which is reconditioned at the facility has a cage within which the rolling elements are located, with the cage serving to maintain the proper spacing between the rolling elements and further holding the rollers around the raceway of the race when the race is removed from an opposing raceway; and wherein the enclosure contains means for opening the cage to release the rolling elements from the race and means for closing a cage around rolling elements to retain the rolling elements on the race.

20. (previously presented) A portable facility for reconditioning an antifriction bearing including inner and outer races provided with opposed raceways, and rolling elements located between the races and along the raceways, said facility comprising:

an enclosure that is portable in the sense that it can be moved by a transport vehicle;

a washer containing a solution for removing grease from the races and rolling elements;

equipment within the enclosure for inspecting the races;

equipment within the enclosure for repairing the bearing; and
spare inner and outer races and rolling elements located within the enclosure to
replace a damaged race or rolling element.

21. (previously presented) A portable facility according to claim 20 wherein
the bearing has seals to establish fluid barriers at its ends, and the facility further
comprises spare seals located within the enclosure for replacing the seals of the
bearing.

22. (previously presented) A portable facility according to claim 20 wherein
the equipment for inspecting the races includes a fixture which shines a light on the
inner race to enable a workman to observe the raceway of the inner race.

23. (previously presented) A portable facility according to claim 20 wherein
the equipment for inspecting the bearing includes a gauge that measures the diameter
of a bore that extends through the inner race.

24. (previously presented) A portable facility according to claim 20 wherein
the outer race is unitary and has two raceways which are inclined downwardly toward
each other; wherein the inner race is on two separate components, each having a
raceway that is presented toward a raceway of the outer race and is inclined in the
same direction as the raceway toward which it is presented; wherein the rolling
elements are arranged in two rows, there being a separate row around each raceway of

the inner race; wherein the bearing further includes a cage located around each component of the inner race for maintaining the proper spacing between the rolling elements and for holding the rolling elements around the component in the absence of the outer race; and wherein the facility further includes within the enclosure new cages to replace the cage of either component of the inner race; and wherein the equipment for repairing the bearing includes a press which will plastically deform the cage around either component of the inner race to free the rolling elements from that race and a press for plastically deforming a replacement cage around the component of the inner race to capture rolling elements about that component.

25. (previously presented) A portable facility according to claim 24 wherein the bearing further includes a spacer located between the components of the inner race and being long enough to impart the end play to the bearing; and wherein the facility further comprises a lateral measuring machine which rotates the inner race within the outer race, applies axially directed forces to the inner race in both axial directions, and measures the free motion between the inner and outer races resulting from the two directions of force.

26. (previously presented) A portable facility according to claim 20 wherein the equipment for repairing the bearing includes a hand-held grinder.

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27. (previously presented) A portable facility according to claim 20 and further comprising a polishing tool.

28. (previously presented) A portable facility according to claim 27 and further comprising an air-conditioning unit supported on the enclosure and including a dust extraction system.

29. (previously presented) A portable facility according to claim 20 wherein the enclosure is mounted on a railcar.